IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended): A method for generating antialiased lines, comprising the actions of for each respective line, determining which of a plurality of orientation classes that line falls into; and

performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;

wherein said determination is made without the use of an error term or per pixel decisions.

2. (original): The method of claim 1, wherein said classes consist of x-major and y-major.

3. (original): The method of claim 1, wherein said orientation classes correspond one-to-one to said sampling patterns.

4. (canceled)

5. (currently amended): A method for antialiased rendering, comprising the actions of:

(a) identifying, for at least one respective line, which one of a limited number of directions is most nearly parallel to said line; and

(b) performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction;

wherein said identification is made without the use of an error term or per pixel decisions.

6. (original): The method of claim 5, wherein said number of directions is two.

7. (original): A graphics processor which is configured to implement the method of claim 1.

8. (original): A graphics processor which is configured to implement the method of claim 5.

9. (new): The method of claim 2, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.

10. (new): The method of claim 1, wherein said sampling patterns have the same number of sub-pixel sampling points.

11. (new): The method of claim 1, wherein said sampling patterns have four sub-pixel sampling points.

12. (new): The method of claim 5, wherein said sampling pattern has four sub-pixel sampling points.

13. (new): A computer graphics system for generating antialiased lines comprising:

means for determining which of a plurality of orientation classes that a line falls into; and

means for performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;

wherein said determination is made without the use of an error term or per pixel decisions.

14. (new): The system of claim 13, wherein said classes consist of x-major and y-major.

15. (new): The system of claim 14, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.

16. (new): The system of claim 13, wherein said orientation classes correspond one-to-one to said sampling patterns.

17. (new): The system of claim 13, wherein said sampling patterns have the same number of sub-pixel sampling points.

18. (new): The system of claim 13, wherein said sampling patterns have four sub-pixel sampling points.

19. (new): A computer graphics system for generating antialiased lines comprising:

means for identifying, for at least one respective line, which one of a limited number of directions is most nearly parallel to said line; and

means for performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction;

wherein said identification is made without the use of an error term or per pixel decisions.

20. (new): The system of claim 19, wherein said number of directions is two.

21. (new): The system of claim 19, wherein said sampling pattern has four sub-pixel sampling points.

22. (new): A method for generating antialiased lines, comprising the steps of for each respective line:

determining which of a plurality of orientation classes that line falls into; and

performing subpixel sampling using one of a plurality of sampling patterns, in dependence on which of said plurality of orientation classes that line falls into;

wherein said determination is made without the use of an error term or per pixel decisions.

23. (new): The method of claim 22, wherein said classes consist of x-major and y-major.

24. (new): The method of claim 23, wherein said classification of x-major and y-major depends on whether the x or y extent of the line is larger.

25. (new): The method of claim 22, wherein said orientation classes correspond one-to-one to said sampling patterns.

26. (new): The method of claim 22, wherein said sampling patterns have the same number of sub-pixel sampling points.

27. (new): The method of claim 22, wherein said sampling patterns have four sub-pixel sampling points.

28. (new): A method for generating antialiased lines, comprising the steps of:

identifying, for at least one respective line, which one of a limited number of directions is most nearly parallel to said line; and

performing subpixel sampling on said line with a subpixel sampling pattern which has maximal resolution approximately normal to said one direction;

wherein said identification is made without the use of an error term or per pixel decisions.

29. (new): The method of claim 28, wherein said number of directions is two.

SUBST a/ cond.

30. (new): The method of claim 28, wherein said sampling pattern has four sub-pixel sampling points.